

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A load drive circuit, comprising:
 - a drive switching element for switching ON and OFF a load current that is provided between a load and a power source;
 - a gate drive circuit for driving ON and OFF the drive switching element;
 - an input circuit for detecting an operation state of an external switch;
 - a protection circuit for switching, in response to the input circuit detecting the operation state of the external switch as being ON, the gate drive circuit to be in an ON state, and for controlling, in accordance with at least one of an overcurrent status and an overheat status, the gate drive circuit to protect the load drive circuit; and
 - a first current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a first current flowing to the gate drive circuit, the first current blocking switching element being provided in at least one of a path between the gate drive circuit and the power source and a path between the gate drive circuit and a ground.
2. (Currently Amended) A load drive circuit, comprising:
 - a drive switching element for switching ON and OFF a load current that is provided between a load and a power source;
 - a gate drive circuit for driving ON and OFF the drive switching element;
 - an input circuit for detecting an operation state of an external switch;
 - a protection circuit for switching, in response to the input circuit detecting the operation state of the external switch as being ON, the gate drive circuit to be in an ON state,

and for controlling, in accordance with at least one of an overcurrent status and an overheat status, the gate drive circuit to protect the load drive circuit; and

a first current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a first current flowing to the protection circuit, the first current blocking switching element being provided in at least one of a path between the protection circuit and the power source and a path between the protection circuit and a ground.

3. (Currently Amended) The load drive circuit according to claim 1, further comprising:

~~another~~ a second current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a second current flowing to the protection circuit, the second current blocking switching element being provided in at least one of a path between the protection circuit and the power source and a path between the protection circuit and the ground.

4. (Currently Amended) A load drive circuit, comprising:

a drive switching element for switching ON and OFF a load current that is provided between a load and a power source;

a gate drive circuit for driving ON and OFF the drive switching element;

an input circuit for detecting an operation state of an external switch;

a protection circuit for switching, in response to the input circuit detecting the operation state of the external switch as being ON, the gate drive circuit to be in an ON state, and for controlling, in accordance with at least one of an overcurrent status and an overheat status, the gate drive circuit to protect the load drive circuit;

an overcurrent detection circuit for detecting ~~an~~ the overcurrent status to output a detection result to the protection circuit; and

a current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a current flowing to the overcurrent detection circuit, the current blocking switching element being provided in at least one of a path between the overcurrent detection circuit and the power source and a path between the overcurrent detection circuit and a ground.

5. (Currently Amended) The load drive circuit according to claim 1, further comprising:

an overcurrent detection circuit for detecting ~~an~~the overcurrent status to output a detection result to the protection circuit; and

~~another~~a second current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a second current flowing to the overcurrent detection circuit, the second current blocking switching element being provided in at least one of a path between the overcurrent detection circuit and the power source and a path between the overcurrent detection circuit and the ground.

6. (Currently Amended) The load drive circuit according to claim 2, further comprising:

an overcurrent detection circuit for detecting ~~an~~the overcurrent status to output a detection result to the protection circuit; and

~~another~~a second current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a second current flowing to the overcurrent detection circuit, the second current blocking switching element being provided in at least one of a path between the overcurrent detection circuit and the power source and a path between the overcurrent detection circuit and the ground.

7. (Currently Amended) The load drive circuit according to claim 3, further comprising:

an overcurrent detection circuit for detecting ~~an~~ the overcurrent status to output a detection result to the protection circuit; and

~~another~~ a third current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a third current flowing to the overcurrent detection circuit, the third current blocking switching element being provided in at least one of a path between the overcurrent detection circuit and the power source and a path between the overcurrent detection circuit and the ground.

8. (Previously Presented) A load drive circuit, comprising:

a drive switching element for switching ON and OFF a load current that is provided between a load and a power source;

a gate drive circuit for driving ON and OFF the drive switching element;

an input circuit for detecting on operation of an external switch;

a protection circuit for switching, in response to the input circuit detecting the operation state of the external switch as being ON, the gate drive circuit to be in an ON state, and for controlling, in accordance with at least one of an overcurrent status and an overheat status, the gate drive circuit to protect the load drive circuit;

an overheat detection circuit for detecting the overheat status to output the detection result to the protection circuit; and

a current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a current flowing to the overheat detection circuit, the current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and a ground.

9. (Currently Amended) The load drive circuit according to claim 1, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

~~another~~ a second current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a second current flowing to the overheat detection circuit, the second current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

10. (Currently Amended) The load drive circuit according to claim 2, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

~~another~~ a second current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a second current flowing to the overheat detection circuit, the second current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

11. (Currently Amended) The load drive circuit according to claim 3, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

~~another~~ a third current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a third current flowing to the overheat detection circuit, the third current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

12. (Currently Amended) The load drive circuit according to claim 4, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

another current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a another current flowing to the overheat detection circuit, the another current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

13. (Currently Amended) The load drive circuit according to claim 5, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

~~another~~ a third current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a third current flowing to the overheat detection circuit, the third current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

14. (Currently Amended) The load drive circuit according to claim 6, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

~~another~~ a third current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a third current flowing to the overheat detection circuit, the third current blocking switching element being

provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

15. (Currently Amended) The load drive circuit according to claim 7, further comprising:

an overheat detection circuit for detecting the overheat status to output a detection result to the protection circuit; and

~~another~~ a fourth current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a fourth current flowing to the overheat detection circuit, the fourth current blocking switching element being provided in at least one of a path between the overheat detection circuit and the power source and a path between the overheat detection circuit and the ground.

16. (Currently Amended) A load drive circuit, comprising:

a drive switching element for switching ON and OFF a load current that is provided between a load and a power source;

a gate drive circuit for driving ON and OFF the drive switching element;

an input circuit for detecting an operation state of an external switch;

a protection circuit for switching, in response to the input circuit detecting the operation state of the external switch as being ON, the gate drive circuit to be in an ON state, and for controlling, in accordance with at least one of an overcurrent status and an overheat status, the gate drive circuit to protect the load drive circuit;

a current limitation circuit for ~~causing~~ limiting, when a voltage ~~decline~~ drop between both ends of the drive switching element exceeds a predetermined threshold value, ~~the both ends of the drive switching element to be short-circuited to limit the~~ load current flowing ~~to in~~ the drive switching element; and

a current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a current flowing to the current limitation circuit, the current blocking switching element being provided in ~~at least one of a path between the current limitation circuit and the power source and a path on an output terminal side of the current limitation circuit.~~

17. (Currently Amended) The load drive circuit according to claim 1, further comprising:

a current limitation circuit for ~~causing~~ limiting, when a voltage ~~decline drop~~ between both ends of the drive switching element exceeds a predetermined threshold value, ~~the both ends of the driving switching element to be short circuited to limit the~~ load current flowing to in the drive switching element; and

another current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, ~~a~~ another current flowing to the current limitation circuit, the another current blocking switching element being provided in ~~at least one of a path between the current limitation circuit and the power source and a path on an output terminal side of the current limitation circuit.~~

18. (Currently Amended) A load drive circuit, comprising:

a drive switching element for switching ON and OFF a load current that is provided between a load and a power source;

a plurality of control sections for drive controlling of the drive switching element while protecting the drive switching element from a predetermined abnormality status; and

an input circuit for detecting an operation state of an external switch;

a current blocking switching element for blocking, in response to the input circuit detecting the operation state of the external switch as being OFF, a current flowing to the control sections, the current blocking switching element being provided in at least one of a

path between at least one of the control sections and the power source and a path between the
at least one of the control sections and a ground.